	elationships between management practices and milk production by herd size. Herd Size										
	30-99 Cows		100-199 Cows		200-499 Cows		500 or More Cows				
-	High	Low	High	Low	High	Low	High	Low			
Pounds per cow+	19,600	15,750	20,450	16,714	21,200	16,500	22,390	18,668			
Number of herds^	247	256	95	97	66	69	38	38			
rumoer of nords	2-17	230	73	Percent of		0)	30	30			
Records				T CTOCHT OF	i roduoci s						
DHIA	81.4	21.5*	79.0	21.7*	81.8	29.0*	73.7	47.4*			
On-farm computer	20.2	5.9*	32.6	14.4*	57.6	27.5*	92.1	55.3*			
Milk and Dairy Beef Quality Assurance Program (MDBQA)	16.6	7.4*	29.5	7.2*	22.7	11.6	29.0	21.0			
Total mixed ration	47.8	31.3*	82.1	59.8*	90.9	72.5*	86.8	84.4			
Test forage for ration balancing	91.9	55.1*	97.9	69.1*	95.6	66.7*	92.1	86.8			
Pasture cows	46.6	69.9*	16.8	48.5*	15.2	42.0*	2.6	21.1*			
Raise feeds (≥50% feed fed)	.0.0	07.17	10.0	1010	10.2	.2.0	2.0				
Forage	97.2	96.1	96.1	98.0	75.8	63.8	57.9	55.3			
Feed grains	68.4	59.4*	66.3	47.4*	47.0	33.3	5.3	23.7*			
50-100% of cows administered:											
Bovine somatotropin (bST)	9.4	1.6*	20.0	4.1*	37.9	4.3*	34.2	7.9*			
Systematic prostaglandins	11.0	3.9*	17.9	5.1*	28.8	1.4*	23.7	15.8*			
Use break-even milk level to determine culling	35.2	21.9*	46.3	32.0*	62.1	37.7*	81.6	57.9*			
Separation of calves/ mothers							'				
Immediately, no nursing	54.2	45.3*	56.8	34.0*	43.9	31.9*	55.3	23.7*			
After nursing, but <12 hours	22.3	18.0*	21.1	20.6*	40.9	15.9*	31.6	36.8*			
After nursing, within 12-24 hrs	16.6	16.8*	16.8	15.5*	15.2	27.5*	10.5	31.6*			
After nursing, but >24 hours	6.9	19.9*	5.3	29.9*	0.0	24.7*	2.6	7.9*			
Colostrum feeding		•				•					
Nurse only	21.5	43.0*	24.2	57.7*	22.7	59.4*	15.8	42.1*			
Hand-fed: bucket or bottle	72.5	55.8*	67.4	39.2*	59.1	33.3*	57.9	36.8*			
Hand-fed: esophageal feeder	6.0	1.2*	8.4	3.1*	18.2	7.3*	26.3	21.1*			
Quantity of colostrum fed		•									
4 or more quarts	35.2	14.8*	40.0	11.3*	39.4	8.7*	42.1	18.4*			
2 - 4 quarts	32.0	25.4*	27.4	26.7*	27.3	18.9*	31.6	13.2*			
Less than 2 quarts	11.3	16.8*	8.4	8.3*	10.6	13.0*	10.5	26.3*			
Nurse only	21.5	43.0*	24.2	57.7*	22.7	59.4*	15.8	42.1*			
Dairy heifers contract raised	8.9	1.6*	5.3	4.1	15.2	5.8	21.1	41.1			
Services provided by a veterinarian	n	•									
Animal diagnosis & treatment	95.6	91.0*	95.8	97.9	98.5	91.3	97.4	92.1			
Provide drugs or vaccines	94.3	82.8*	92.6	90.7	92.4	82.6	92.1	86.8			
Vaccination consultation	89.5	69.5*	91.6	72.2*	92.4	84.1	97.4	81.6*			
Reproductive consultation	90.2	67.2*	89.5	75.3*	89.4	76.8	94.7	81.6			
Herd diagnostics	58.7	45.7*	72.6	59.8	75.8	62.3	81.6	79.0			

⁺ Values for high herds are minimum production per cow. Values for low herds are maximum production per cow.

^{*} Difference between high and low percentile producers is statistically significant at the .05 level.

^ Top and bottom quartiles differed in number of herds due to a number of herds falling at the cut point.

	Relationships (continued).										
	Herd Size										
	30-99 Cows		100-199 Cows		200-499 Cows		500 or More Cows				
	High	Low	High	Low	High	Low	High	Low			
Pounds per cow+	19,600	15,750	20,450	16,714	21,200	16,500	22,390	18,668			
Number of herds^	247	256	95	97	66	69	38	38			
	Percent of Producers										
Vaccinations, cows											
BVD	90.3	57.0*	91.6	76.3*	95.5	75.4*	89.5	86.8			
IBR	88.3	56.3*	87.4	74.2*	93.9	76.8*	76.3	89.5			
PI3	82.2	49.2*	81.1	69.0	77.3	69.6	71.1	76.3			
BRSV	79.4	48.1*	76.8	61.9*	84.9	65.2*	63.2	79.0			
H. somnus	53.4	25.0*	55.8	37.1*	59.1	43.5	42.1	60.5			
Leptospirosis	83.8	60.9*	86.3	74.2*	92.4	78.3*	89.5	94.7			
<u>Salmonella</u>	19.0	14.1	26.3	18.6	33.3	39.1	42.1	57.9			
<u>E</u> . <u>coli</u> mastitis	28.3	19.5*	54.7	35.1*	60.6	46.4	76.3	68.4			
Clostridia	83.8	60.9*	86.3	74.2*	92.4	78.3*	89.5	94.7			
Brucellosis (heifers)	18.6	13.7	26.3	20.6	33.3	34.8	39.5	47.4			
Johne's disease (heifers)	14.2	13.7	33.7	26.8	39.4	33.3	44.7	50.0			
Preventive practices											
Deworming cows	57.9	50.8	42.1	68.0*	43.9	53.6	15.8	44.7*			
Vitamins A-D-E, cows (injections or feed)	91.5	77.7*	94.7	75.3*	84.9	68.1*	92.1	76.3			
Probiotics, cows & heifers	15.4	7.8*	16.8	10.3	19.7	10.1	26.3	29.0			
Selenium (injection or feed), lactating cows	90.3	60.2*	87.4	60.8*	80.3	50.7*	68.4	63.2			
Coccidiostats in feed, heifers	70.5	28.9*	76.8	43.3*	66.7	36.2*	57.9	57.9			
Ionophores, heifers	70.5	22.7*	67.4	45.4*	66.7	26.1*	60.5	50.0			
Cattle brought onto operation	38.5	34.4	46.3	46.4	51.5	62.3	50.0	79.0*			
Of operations that brought cattle o	nto their premi	ses									
Number of operations	95	88	44	45	34	43	19	30			
Quarantine all arrivals	9.5	4.6	11.4	15.6	20.6	23.3	21.1	23.3			
Require cattle vaccination before l	oringing onto o	peration									
Brucellosis	60.0	47.7	52.3	64.4	52.9	76.7*	73.7	80.0			
BVD	51.6	43.3	54.6	57.8	64.7	53.5	68.4	60.0			
IBR	51.6	33.3*	54.6	57.8	64.7	76.7	73.7	80.0			
Leptospirosis	53.7	38.6	54.6	55.6	64.7	51.2	73.7	53.3			
Test cattle before bringing onto op											
Brucellosis	24.2	33.3*	34.1	60.0*	20.6	51.2*	63.2	56.7			
Johne's disease	5.3	8.0	15.9	13.3	2.9	4.7	10.5	10.0			
BVD	13.7	15.9	15.9	28.9	11.8	21.4	21.1	16.7			
ТВ	23.2	19.3	29.6	37.8	17.7	21.4	36.8	33.3			
Test dairy cows before bringing or			1				1				
Somatic cell count	28.0	20.0	70.0	23.8*	33.3	19.1	28.6	55.6			
Milk culture	8.0	10.0	20.0	4.8	25.0	19.1	28.6	44.4			

⁺ Values for high herds are minimum production per cow. Values for low herds are maximum production per cow.

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^ Top and bottom quartiles differed in number of herds due to a number of herds falling at the cut point.